

SEMICONDUCTOR LASER AND METHOD OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

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A window structure type AlGaInP semiconductor laser
able to suppress abnormal growth in the vicinity of a
ridge and having good surface morphology, wherein a least
one step-like structure is provided on a substrate having
10 a surface tilted to a [0-1-1] direction from a (100)
plane, a semiconductor stack is formed on the substrate
and comprises an active layer including two types of
Group III elements including at least indium (In) and
Group V elements including phosphorus (P), a cladding
15 layer of a first conductivity, a cladding layer of a
second conductivity, end surfaces of an active layer
serve as end surfaces of a resonator, a light guide is
formed between and the end surfaces of the resonator, and
the light guide is arranged at an upper step side of the
20 step-like structure so that a portion of the light guide
not including resonator end surfaces is positioned in the
vicinity of the step-like structure and so that the
resonator end surface portions of the light guide are
farther from the step-like structure, and a method of
25 production thereof.